Dec. 2, 1930. P. J. McGRATH 1,783,579

AUTOMOBILE GATE

Filed Aug. 6, 1929

Fig. 1.

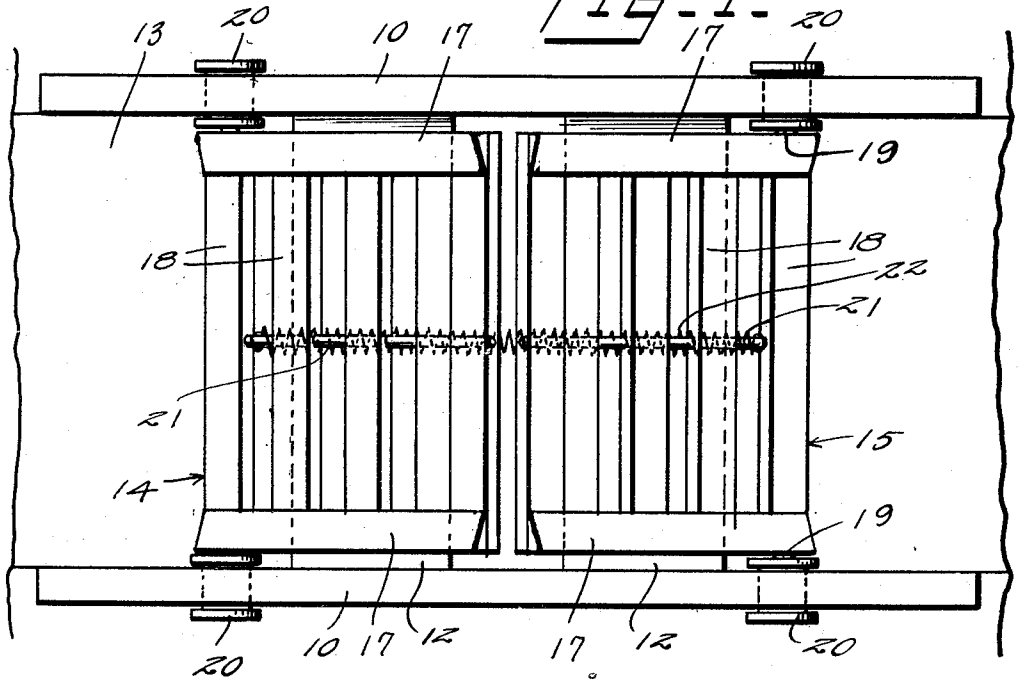


Fig. 2.

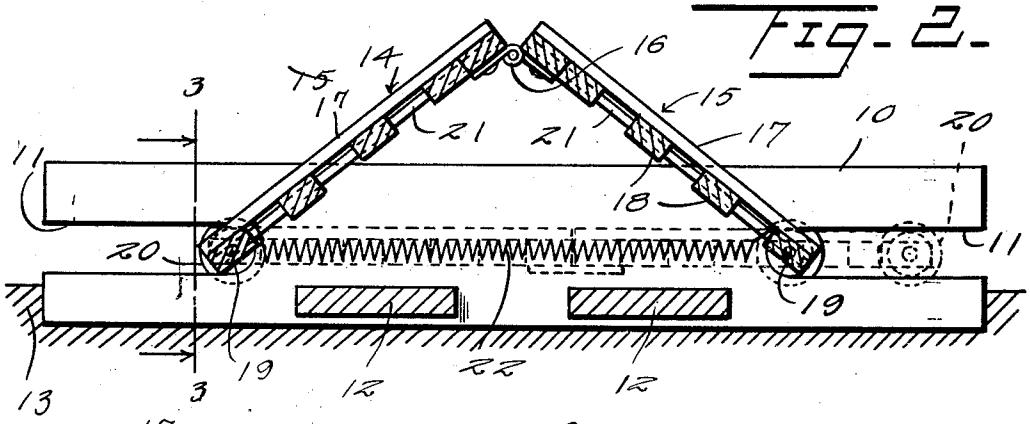
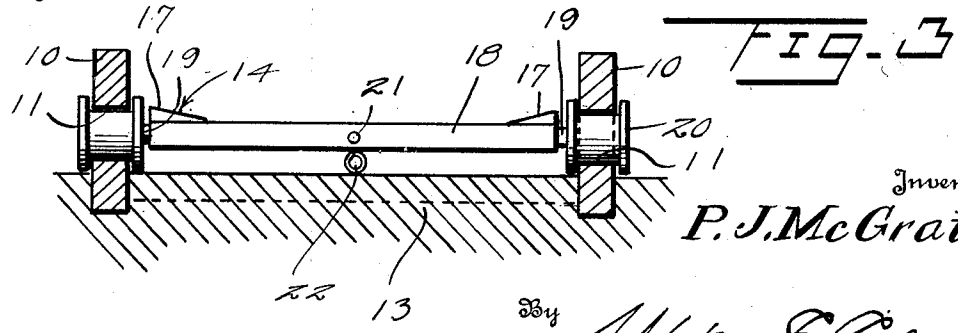


Fig. 3.



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UNITED STATES PATENT OFFICE

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AUTOMOBILE GATE

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This invention relates to gates of that character wherein the two sections of the gate are raised upward at the connecting joint between the sections so that the gate itself, when closed, is in the form of a triangle, the base of which constitutes the road, the construction being such that when an automobile approaches the gate, the front wheels of the vehicle will strike one of said sections, ride up thereon, and force the sections downward, into a horizontal position against the action of an urging means.

The general object of the present invention is to provide a simple and effective device of this character which is so constructed that the wheels of the automobile may ride up on the inclined gate section more easily than with other constructions known to me, which has few parts, which cannot get out of order, and which is so constructed that it may be thoroughly protected from snow and ice.

A further object is to provide a construction of this character which is so designed that the wheels of the car cannot catch in the gate and in which both sections are so connected that they must operate together.

Other objects will appear in the course of the following description.

My invention is illustrated in the accompanying drawing, wherein:—

Figure 1 is a top plan view of a gate constructed in accordance with my invention;

Figure 2 is a longitudinal sectional view thereof;

Figure 3 is a section on the line 3—3 of Figure 2 with the gate depressed.

Referring to this drawing, it will be seen that my improved gate includes the side pieces 10 which are disposed on each side of the road sufficiently far apart as to permit the passage of cars between them. These side pieces are longitudinally slotted, at 11, at each end and the side pieces are connected by transverse beams 12 or equivalent means. The roadway 13 is of such height that it will extend up to the lower walls of the slots 11 without impeding free movement through these slots.

Disposed between these side pieces are the gate sections 14 and 15, which are alike in construction, and which are hinged to each other, at 16, so that the gate sections may be shifted into an upwardly convergent position or downward into an aligned position. The gate sections each consist of the longitudinal rails 17 which are bolted, nailed or otherwise engaged with transverse planks 18. The lower end of each gate section has outwardly projecting pins or shafts 19 carrying rollers 20 preferably flanged and engaging in the slots 11.

At the adjacent ends, each gate section has two planks 18 disposed in close proximity to each other and extending through the several planks are the bolts or rods 21. A coiled contractile spring 22 is connected at its opposite ends to the lower ends of these rods 21 and thus urges the two sections of the gate to an upwardly convergent position so that the gate, with the roadway as a base, forms a triangle projecting upward any sufficient distance to constitute a proper guard to prevent cattle from passing out through the gate.

It will be noted that the rails 17 are beveled inward and downward so that they constitute guides, and as an automobile approaches the gate the front wheels will run up between these guides on the inclined section of the gate and the weight will force the gate downward to a horizontal position against the action of the spring 22, the thrust of the automobile, when it strikes one of the gate sections, holding the rollers of this gate section against the end walls of the slot 11, the rollers of the opposite gate section rolling outward in their slots 11 until the gate has come to a horizontal position. When the automobile has passed off of the gate, the gate will rise to its triangular position, as shown.

While I have not illustrated this, it is obvious that the sections of the gate may be so formed as to prevent any snow falling through between the slats or cross planks of the gate. The gate may thus be either solid or telescopic and the side pieces 12 may have their ends housed in so as to prevent any possible collection of snow or ice within the slots 11.

Thus the gate will be entirely protected

from the entrance of snow or ice into the space beneath the gate and thus the gate may readily be pushed down or as readily raised up. It will be seen that the gate is so simple that there is nothing to get out of order and that when a car runs onto the gate on one side, the opposite section of the gate will be forced downward, and furthermore with my construction there is no chance of the car catching as the gate must slide back from under the car and cannot move straight upward.

I claim:—

1. A gate comprising side members having longitudinally slotted ends, a gate proper formed of two hingedly connected sections, each section at its outer end having laterally projecting rollers engaging in the slots of the side members, and a spring connecting the remote ends of the two sections of the gate and urging the two sections of the gate to an upwardly convergent position.

2. A gate comprising side members having longitudinally slotted ends, a gate proper formed of two hingedly connected sections, each section at its outer end having laterally projecting rollers engaging in the slots of the side members, and a spring connecting the remote ends of the two sections of the gate and urging the two sections of the gate to an upwardly convergent position, the slots in the side members being of sufficient length to permit one pair of rollers to be disposed against the end wall of their corresponding slots, while the other pair slide in their corresponding slots, the outer face of each section of the gate having guide rails at each end forming part of the frame of the gate section.

In testimony whereof I hereunto affix my signature.

PATRICK J. McGRATH.